

ABSTRACT OF THE DISCLOSURE**SYSTEM FOR TRANSMITTING LOCAL AREA NETWORK (LAN) DATA
FRAMES THROUGH AN ASYNCHRONOUS TRANSFER MODE (ATM)
CROSSBAR SWITCH**

An improved data transmission system including multiple local area networks (LANs) coupled by a hub that further includes multiple LAN adapters coupled to the LANs, and an asynchronous transfer mode (ATM) crossbar switch coupling all LAN adapters. LAN data frames are converted into concatenated slots of an identical size and transmitted through the ATM crossbar switch. At least the requesting LAN adapter coupled to the LAN to transmit LAN data frame includes a serial communication controller (SCC) that converts a received LAN data frame into serial data. The SCC also includes a means for converting serial data to LAN data frames.